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EXAMINER

MEUCCI, MICHAEL D

ART UNIT	PAPER NUMBER
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2142

DATE MAILED: 04/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/427,938

Applicant(s)

HENDRICKS ET AL.

Examiner

Michael D Meucci

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 1999.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-79 is/are pending in the application.
- 4a) Of the above claim(s) 79 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-78 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 October 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/3/02.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

A

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-78, drawn to a virtual on-demand electronic book system, classified in class 709, subclass 200.
 - II. Claim 79, drawn to a user interface, classified in class 345, subclass 901.
2. The inventions are distinct, each from the other because of the following reasons:

Inventions group I and group II are related as a combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not required the particulars of the subcombination as claimed because the virtual on-demand electronic book system is not required to have a user interface for ordering and receiving electronic books. The subcombination has separate utility such as a user interface for ordering and receiving other goods/services such as movies, groceries, telephone service, games, etc. instead of use in a virtual on-demand electronic book system.

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3. During a telephone conversation with John Harrop (Reg. No. 41,817) on 21 March 2005, a provisional election was made under 35 U.S. C. 121 without traverse to prosecute the invention of virtual on-demand electronic book systems, claims 1-78. Affirmation of this election must be made by applicant in replying to this Office action. Claim 79 is withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Objections

4. Examiner recommends using a term such as --super queue-- or another distinguishing identifier in place of "the queue" in claims 29-37 to resolve ambiguity issues when identifying the larger/outer queue. Examiner also recommends renaming "one or more second queues" as --one or more additional queues--.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claim 9 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is unclear to the examiner what is meant to be disclosed by a service time guarantee.

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For the purpose of applying art, it will be presumed that the service time guarantee is a maximum time threshold.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 30-35 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear to the examiner what is meant to be disclosed by "one or more second queues" in claims 30-32 and 34-35. For the purpose of applying art, it will be presumed that "one or more second queues" means --one or more additional queues--. Clarification of the matter is required.

9. Claim 57-58 recite the limitation "the second sections" in lines 2 and 2-4 respectively. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 101

10. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

11. Claims 65-78 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. In view of applicant's disclosure, specification page 76, lines 18-21, the computer-readable medium is not limited to tangible embodiments, instead being defined as including both tangible embodiments (e.g.

hardware) and intangible embodiments (e.g. software). As such, the claim is not limited to statutory subject matter and is therefore non-statutory.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 29-30, 33, 36 rejected under 35 U.S.C. 102(b) as being anticipated by Payton (U.S. 5,790,935).

a. As per claim 29, Payton teaches: a broadcast module that determines a selection of electronic books for broadcast to the subscribers (lines 37-49 of column 8); a packet assembly module that assembles a packet comprising an ordered electronic book and a header section, the header section including an address of a subscriber that ordered the electronic book (inherent); an electronic book order module that receives and processes orders from subscribers for electronic books (line 59 of column 6 through line 60 of column 7 and Fig. 3a-3c); queue selection module that determines a queue for storing the packet (lines 36-60 of column 7 and Fig. 3c); and a queue service module that determines a priority for delivery of the packet from the queue (lines 22-45 of column 5 and lines 26-36 of column 8).

b. As per claim 30, Payton teaches: the queue includes a first queue and one or more second queues, and wherein the queue service module determines a higher

priority for delivery for any packet in the first queue than for any packet in the one or more second queues (line 59 of column 6 through line 12 of column 7).

c. As per claim 33, Payton teaches: the first priority queue is an on-demand queue (abstract and lines 21-23 of column 7).

d. As per claim 36, Payton teaches: an Internet web site, the Internet web site including one or more web servers, wherein the subscribers access the system by accessing a web server (line 45 of column 4 through line 20 of column 5 and Fig. 2).

14. Claims 38-46, 50-56, 59-61, and 63-64, rejected under 35 U.S.C. 102(b) as being anticipated by Hendricks (WO 95/15649) hereinafter referred to as Hendricks.

a. As per claim 38, Hendricks teaches: a main memory that stores main sections of the electronic books (item 600 in Fig. 6a and Fig. 8); a main interface that receives a request for a main section of an electronic book (lines 18-22 of page 18 and Fig. 10-12); and a main processor that locates the requested main section, wherein the main interface provides the located main section (item 628 of Fig. 8).

b. As per claim 39, Hendricks teaches: an auxiliary memory that stores auxiliary sections of the electronic books (lines 6-7 of page 21 and item 728 of Fig. 11); and an auxiliary interface that provides auxiliary sections of the electronic books ("Channel Modulators" of item 1020 in Fig. 18a).

c. As per claim 40, Hendricks teaches: the main memory and the auxiliary memory are co-located (Fig. 18a).

- d. As per claim 41, Hendricks teaches: the main interface and the auxiliary interface are co-located (item 1020 in Fig. 18a).
- e. As per claims 42-43, Hendricks teaches: the main memory and the main interface comprise a kiosk (line 34 of page 1 through line 4 of page 2 and lines 19-28 of page 2).
- f. As per claim 44, Hendricks teaches: the auxiliary interface broadcasts auxiliary sections of selected electronic books ("Channel Modulators" of item 1020 in Fig. 18a).
- g. As per claim 45, Hendricks teaches: the auxiliary sections are broadcast over one of a wired telephone network, a wireless telephone network, a satellite television network, a cable television network, a broadcast television network, a local area network, and a radio network (line 28 of page 16 through line 5 of page 17 and Fig. 15-18b).
- h. As per claim 46, Hendricks teaches: the auxiliary interface provides the auxiliary sections on demand (lines 20-27 of page 24, lines 3-29 of page 36, Fig. 14a-j, and "Channel Modulators" of item 1020 in Fig. 18a)
- i. As per claim 50, Hendricks teaches: a main section includes an entire electronic book (lines 7-26 of page 33).
- j. As per claim 51, Hendricks teaches: a storage module that directs storage of electronic books in a main memory (lines 3-13 of page 21); a broadcast module that determines a selection of the electronic books for broadcast to readers (lines 17-26 of page 26, lines 3-17 of page 37, and Fig. 18a); and an electronic book order module that

receives and processes orders from the readers (lines 3-17 of page 37), wherein the orders received from the readers are based on the selection broadcast to the readers (lines 1-16 of page 26)

k. As per claims 52-53, Hendricks teaches: the selection includes all or a subset of all electronic books stored in the main memory (line 34 of page 24 through line 4 of page 25, lines 20-26 of page 28, and Fig. 14b-c).

l. As per claim 54, Hendricks teaches: an authorization module that provides an authorization signal in response to an electronic book order request, the authorization signal providing access to one or more electronic books (lines 3-14 of page 22).

m. As per claim 55, Hendricks teaches: the selection includes first sections of all electronic books in the main memory (item 600 in Fig. 6a and Fig. 8).

n. As per claim 56, Hendricks teaches: an authorization module that provides access to second sections of specific electronic books, wherein a first section and a second section comprise the electronic book, and wherein the broadcast module provides second sections corresponding to electronic books ordered by the reader (lines 3-14 of page 22).

o. As per claim 59, Hendricks teaches: the selection includes first sections of a subset of electronic books in the main memory (line 34 of page 24 through line 4 of page 25, lines 20-26 of page 28, and Fig. 14b-c).

p. As per claim 60, Hendricks teaches: a reader data module that receives, processes and stores reader-specific data (lines 25-34 of page 25 and Fig. 14g-h); and

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an output module that prepares a reader profile, wherein the broadcast modules determines the selection based on the reader profile (line 33 of page 27 through line 12 of page 28).

q. As per claim 61, Hendricks teaches: the reader profile is an individual reader profile (line 33 of page 27 through line 12 of page 28).

r. As per claim 63, Hendricks teaches: the reader-specific data includes one or more of books read data, television programs watched data, demographic data and reader-provided data (line 33 of page 27 through line 12 of page 28).

s. As per claim 64, Hendricks teaches: the selection comprises a menu of available electronic books (Fig. 14c, 14e, and 14i).

15. Claims 65-70, 73-75, and 77-78 contain aspects similar to those disclosed in claims 51-56, 59-61, and 63-64 respectively and are rejected under the same rationale.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 1-3, 6-8, 10, and 14-17 rejected under 35 U.S.C. 103(a) as being unpatentable over Payton in view of Lauffenburger et al. (U.S. 6,813,249 B1) hereinafter referred to as Lauffenburger.

a. As per claim 1, Payton teaches: a main memory that stores electronic books for delivery to subscribers in the system (abstract and Fig. 2); a queuing processor coupled to the main memory that receives electronic book orders and determines a queue location for an ordered electronic book (lines 3-7 of column 7).

Payton fails to teach: first queues that temporarily store first sections of electronic books; and second queues that temporarily store second sections of electronic books. However, Lauffenburger discloses: "a transmission circuit for transmitting data from a host to a remote includes a plurality of memory queues, and a memory controller operable to prefetch a burst of data cells from the host, wherein a first data cell of the burst is transmitted by the memory controller to the remote and the remainder of the data cells of the burst are stored in the plurality of memory queues for later transmission to the remote," (lines 51-59 of column 1).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have first and second queues that temporarily store first and second sections of electronic books, respectively. "Technical advantages of the present invention relate to a data communication system having the ability to efficiently and economically transfer ATM data cells from an ATM endpoint to an ATM network. More particular technical advantages include a data communication system that prioritizes the transmission of ATM data cells from an ATM endpoint to an ATM network based on demand by dynamically allocating portions of memory associated with the ATM endpoint to queue data cells originating from a common and frequently recurring VCA at the ATM endpoint," (line 60 of column 1 through line 3 of column 2 in Lauffenburger). It

is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to have first and second queues that temporarily store first and second sections of electronic books, respectively, in the system as taught by Payton.

b. As per claim 2, Payton teaches: queues comprise: an on-demand queue and a popular content queue (line 59 of column 6 through line 35 of column 7).

c. As per claim 3, Payton teaches: a priority queue server which empties queues based on a priority model (lines 26-37 of column 8).

d. As per claim 6, Payton fails to teach: the priority model comprises: determining a length of each queue; and transmitting an electronic book from a queue having a longest length. However, Lauffenburger discloses: "Receive data controller 32 controls the maximum size of burst 22 by determining the maximum number of data cells 18 that may be transmitted across bus 28 in any particular burst 22," (lines 8-11 of column 7) and "Other relevant factors affecting the length of burst 22 include, but are not limited to, the size of memory queues 36 and the amount of bus 28 bandwidth necessary to ensure adequate host 12 reception of data from remote 14," (lines 16-20 of column 7).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have the priority model comprise: determining a length of each queue; and transmitting an electronic book from a queue having a longest length. "By controlling the size of burst 22, receive data controller 32 avoids impeding the performance of other components of host 12 that may be competing for bandwidth on

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bus 28 while still optimizing the use of the available bandwidth on bus 28," (lines 11-16 of column 7 in Lauffenburger). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to have the priority model comprise: determining a length of each queue; and transmitting an electronic book from a queue having a longest length in the system as taught by Payton.

e. As per claim 7, Payton teaches searching queues for similar electronic book orders and broadcasting completed electronic book orders simultaneously (lines 12-15 of column 3).

f. As per claim 8, Payton teaches: an internet website; a web server coupled to the internet web site; a delivery server coupled to the web server; and a transaction server coupled to the web server, wherein the queuing processor receives electronic book orders from the transaction server and the delivery server receives ordered electronic books from the queue priority server (line 45 of column 4 through line 20 of column 5 and Fig. 2).

g. As per claim 10, Payton teaches: an electronic book viewer, the viewer comprising: a receiver that receives electronic books, a transmitter that transmits electronic book orders, and a memory coupled to the receiver that stores the electronic books; and a processor coupled to the receiver and the memory that controls processing on the viewer, wherein the receiver receives broadcasts of first sections of electronic books and stores the first sections in the memory (abstract, line 62 of column 9 through line 20 of column 10, and Fig. 8).

h. As per claim 14, Payton teaches: specified electronic books are broadcast on a cyclical basis (lines 61-67 of column 7).

i. As per claim 15, Payton teaches: specified electronic books are broadcast on a cyclical basis (lines 61-67 of column 7). Payton fails to teach first sections of the electronic books being broadcast, but this is obvious because the inclusion of first and second sections has already been covered in the rejection of claim 1.

j. As per claim 16, Payton teaches: (books) to be broadcast are determined by reference to one of electronic books read data, demographic data, and subscriber preferences (lines 37-49 of column 8). Payton fails to teach first sections of the electronic books being broadcast, but again this is obvious because the inclusion of first and second sections has already been covered in the rejection of claim 1.

k. As per claim 17, Payton teaches: a virtual on-demand menu, the menu broadcast with a broadcast of one of an electronic book and a first section of an electronic book, wherein the menu lists electronic books available on the system (lines 26-36 of column 6).

18. Claim 4 rejected under 35 U.S.C. 103(a) as being unpatentable over Payton in view of Lauffenburger as applied to claim 3, further in view of Chen et al. (U.S. 6,611,531 B1) hereinafter referred to as Chen.

Payton fails to teach: the priority model comprises: emptying the on-demand first section queue; and emptying the popular content first section queue, the on-demand second sections queue and the popular content second sections queue in a round robin

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manner. However, Chen discloses: "Real time virtual channel queues are serviced in a round-robin fashion, and they are completely emptied before any non-real time channel queues are serviced. Non-real time virtual channel queues are serviced when there are no real time cells in the queues. Data channel queues are also serviced in a roundrobin fashion," (lines 45-50 of column 13).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have the priority model comprise: emptying the on-demand first section queue; and emptying the popular content first section queue, the on-demand second sections queue and the popular content second sections queue in a round robin manner. "Priority queuing ensures that frames in outbound voice queues are serviced before data traffic. The MAC of an embodiment supports two service classes, real time and non-real time, but the embodiment is not so limited. The real time class is used for voice and video, and the non-real time class is used for data, but the embodiment is not so limited," (lines 39-44 of column 13 in Chen). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to have the priority model comprises: emptying the on-demand first section queue; and emptying the popular content first section queue, the on-demand second sections queue and the popular content second sections queue in a round robin manner in the system as taught by Payton and Lauffenburger.

19. Claim 5 rejected under 35 U.S.C. 103(a) as being unpatentable over Payton in view of Lauffenburger and Chen as applied to claim 4, further in view of Dobbelstein (U.S. 5,881,269).

Payton fails to teach: 5. The system of claim 4, wherein the priority model includes a timing module, wherein the timing module determines a time an electronic book is stored in the first and the second queues and wherein when a maximum time is exceeded, the server transmits the electronic book out of order. However, Dobbelstein discloses: "The queue flush timer was created to clear up the queues," (lines 60-61 of column 12).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have the priority model include a timing module to transmit the electronic book out of order once a maximum time is exceeded. "However, eventually there is a period when there is no SMB activity. The harvester quits harvesting SMBs which means that new SMB information blocks are not sent into the client threads' SMB queues. The queues remain filled to their specified depth and the client threads are not woken up to process them. A mechanism is required to flush the work left undone by the client threads," (lines 54-60 of column 12 in Dobbelstein). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to have the priority model include a timing module to transmit the electronic book out of order once a maximum time is exceeded in the system as taught by Payton, Lauffenburger, and Chen.

20. Claim 9 rejected under 35 U.S.C. 103(a) as being unpatentable over Payton in view of Lauffenburger as applied to claim 1 above, further in view of Himbeault et al. (U.S. 6,556,561 B1) hereinafter referred to as Himbeault.

Payton fails to teach: a service time guarantee; and the processor establishing a connection with the associated data processing system if the pending service time exceeds the guaranteed service time guarantee. However, Himbeault discloses: "As the maximum wait time is approached, the node forces a collision by transmitting even though it senses another node is already transmitting to force the network into a quiet mode. It then starts transmitting the real time data prior to other nodes beginning transmission," (abstract).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have a service time guarantee; and the processor establishing a connection with the associated data processing system if the pending service time exceeds the guaranteed service time guarantee. "A node on a collision detection protocol based network forces collisions to gain control of the network when it has real time data that needs to be transferred to another node on the network, and then begins transmitting the real time data prior to other nodes gaining control of the network," (abstract of Himbeault). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to have a service time guarantee; and the processor establishing a connection with the associated data processing system if the pending service time exceeds the guaranteed service time guarantee in the system as taught by Payton and Lauffenburger.

21. Claims 11 and 12 rejected under 35 U.S.C. 103(a) as being unpatentable over Payton in view of Lauffenburger as applied to claim 10 above, further in view of Kawakura et al. (U.S. 5,903,901) hereinafter referred to as Kawakura.

Payton fails to teach: when a first section stored in the memory is accessed or a link in the first section of the electronic book is accessed, the processor generates an order for a corresponding second section, and the transmitter transmits the order. However, Kawakura discloses: "According to one aspect of the present invention there is provided a client device for acquiring and displaying hypermedia documents in a hypermedia document processing system, comprising: display means for interpreting and displaying a first page of the hypermedia documents acquired from one server; first transmission means for transmitting a first message requesting a second page of the hypermedia documents to be referred from the first page currently displayed by the display means to a request target server which stores the second page," (lines 6-15 of column 4).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have the processor generate an order for a corresponding second section and the transmitter transmits the order when a first section stored in the memory or a link in the first section of the electronic book is accessed. "It is another object of the present invention to provide a message transmission scheme and a relay server device capable of notifying an information concerning an anchor utilization to the source server, according to a page transfer record and a page request transfer record,"

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(lines 1-5 of column 4 in Kawakura). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to have the processor generate an order for a corresponding second section and the transmitter transmits the order when a first section stored in the memory or a link in the first section of the electronic book is accessed in the system as taught by Payton and Lauffenburger.

22. Claim 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Payton in view of Lauffenburger as applied to claim 1 above further in view of Kessenich et al. (U.S. 6,034,680) hereinafter referred to as Kessenich.

Payton fails to teach: the electronic books comprise an electronic version of one or more of printed book, a magazine, a catalog, a periodical, and a newspaper. However, Kessenich discloses: "Books, magazines, journals, newspapers and the like are now widely available at various web sites, under the general category now commonly referred to as electronic publishing," (lines 20-24 of column 1).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have the electronic books comprise an electronic version of one or more of printed book, a magazine, a catalog, a periodical, and a newspaper. "The internet, as part of the world wide web, has as its primary function establishing links between web site browsers and millions of different web sites, each of which can be expected to provide different kinds of information and data," (lines 16-19 of column 1 in Kessenich). It is for this reason that one of ordinary skill in the art at the time of the

applicant's invention would have been motivated to have the electronic books comprise an electronic version of one or more of printed book, a magazine, a catalog, a periodical, and a newspaper in the system as taught by Payton and Lauffenburger.

23. Claims 18-28 contain aspects similar to those disclosed in claims 1-17 and are rejected under the same rationale.

24. Claim 31 rejected under 35 U.S.C. 103(a) as being unpatentable over Payton as applied to claim 30 above, in view of Chen.

Payton fails to teach: a priority of each one of the one or more second queues is equal. However, Chen discloses: "Real time virtual channel queues are serviced in a round-robin fashion, and they are completely emptied before any non-real time channel queues are serviced. Non-real time virtual channel queues are serviced when there are no real time cells in the queues. Data channel queues are also serviced in a roundrobin fashion," (lines 46-51 of column 13).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have equal priority for each one of the one or more second queues. "Priority queuing ensures that frames in outbound voice queues are serviced before data traffic. The MAC of an embodiment supports two service classes, real time and non-real time, but the embodiment is not so limited. The real time class is used for voice and video, and the non-real time class is used for data, but the embodiment is not so limited," (lines 39-44 of column 13 in Chen). It is for this reason that one of ordinary

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skill in the art at the time of the applicant's invention would have been motivated to have equal priority for each one of the one or more second queues in the system as taught by Payton.

25. Claim 32 rejected under 35 U.S.C. 103(a) as being unpatentable over Payton as applied to claim 30 above, in view of Duan et al. (U.S. 5,923,656) hereinafter referred to as Duan.

Payton fails to teach: a priority of an individual second queue of the one or more second queues is determined based on a length of the individual second queue. However, Duan discloses: "Each input queue orders the received groups of received cells in virtual queues for their corresponding output port by their priority. A calculated priority level is assigned to each virtual queue having cells based upon a priority function. This function may be based upon one or more factors, such as the externally set priority included in the header of each cell, the age of the highest priority cell for each destination port, the length of the cell queue for each destination port," (line 63 of column 3 through line 4 of column 4).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have a priority of an individual second queue of the one or more second queues be determined based on a length of the individual second queue. The prior art shows that basing priority on the length is just one of the options for initializing the scheduler but they consider it a "factor deemed important" (line 5 of column 4) [to the scheduler's operation. It is for this reason that one of ordinary skill in the art at the

time of the applicant's invention would have been motivated to have a priority of an individual second queue of the one or more second queues be determined based on a length of the individual second queue in the system as taught by Payton.

26. Claim 34 and 35 rejected under 35 U.S.C. 103(a) as being unpatentable over Payton as applied to claim 30 above, in view of Lauffenburger.

Payton teaches: one of the queues is a popular content queue and wherein the popular content is broadcast to selected subscribers (abstract and line 59 of column 6 through line 12 of column 7).

Payton fails to teach: the popular content queues are where first/second sections of popular electronic books are stored. However, Lauffenburger discloses: "a transmission circuit for transmitting data from a host to a remote includes a plurality of memory queues, and a memory controller operable to prefetch a burst of data cells from the host, wherein a first data cell of the burst is transmitted by the memory controller to the remote and the remainder of the data cells of the burst are stored in the plurality of memory queues for later transmission to the remote," (lines 51-59 of column 1).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have the popular content queues as the location where first/second sections of popular electronic books are stored. "Technical advantages of the present invention relate to a data communication system having the ability to efficiently and economically transfer ATM data cells from an ATM endpoint to an ATM network. More particular technical advantages include a data communication system

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that prioritizes the transmission of ATM data cells from an ATM endpoint to an ATM network based on demand by dynamically allocating portions of memory associated with the ATM endpoint to queue data cells originating from a common and frequently recurring VCA at the ATM endpoint," (line 60 of column 1 through line 3 of column 2 in Lauffenburger). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to have the popular content queues as the location where first/second sections of popular electronic books are stored in the system as taught by Payton.

27. Claim 37 rejected under 35 U.S.C. 103(a) as being unpatentable over Payton as applied to claim 29 above, in view of Craig (U.S. 5,790,176).

Payton fails to teach: the electronic book order module determines that multiple electronic book orders are for a same electronic book, and wherein the broadcast module initiates a simultaneous broadcast of the same electronic book to multiple subscribers. However, Craig discloses: "simultaneous broadcast of the same feature over one output port to multiple subscribers," (lines 58-59 of column 13).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to broadcast the same electronic book to multiple subscribers when the electronic book order module determines that multiple electronic book orders are for the same electronic book. "The Session Supervisor also performs network resource optimization by the simultaneous broadcast," (lines 56-58 of column 13). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention

would have been motivated to broadcast the same electronic book to multiple subscribers when the electronic book order module determines that multiple electronic book orders are for the same electronic book in the system as taught by Payton.

28. Claim 47 rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks as applied to claim 39 above, in view of Brueckheimer et al. (U.S. 6,252,876 B1) hereinafter referred to as Brueckheimer.

a. As per claim 47, Hendricks fails to teach: the auxiliary interface provides an auxiliary section before the main interface provides a corresponding main section. However, Brueckheimer discloses: "Preferably the step of updating the list to insert a new element into the list at a particular position comprises moving data elements which follow that position forward through the sequence of memory locations to open a space to fit the new element, and inserting the new element into the space," (line 66 of column 2 through line 4 of column 3).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have the auxiliary interface provide an auxiliary section before the main interface provides a corresponding main section. "Preferably the elements of the list are accessed in the sequence in which they are stored and the list is updated during the accessing of the structure. Performing updates during the normal accessing of the list removes the necessity to interrupt the system during an update period," (lines 16-18 of column 3 in Brueckheimer). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to have the

auxiliary interface provide an auxiliary section before the main interface provides a corresponding main section in the system as taught by Hendricks.

b. As per claim 48, Hendricks teaches: the auxiliary section and the main section are linked (Fig. 18a).

c. As per claim 49, Hendricks teaches: the main section overwrites the auxiliary section (line 16 of page 17 through line 8 of page 18).

29. Claim 57 rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks as applied to claim 55 above, in view of Lauffenburger.

Hendricks fails to teach: the first sections are stored in a first section queue and the second sections are stored in a second section queue. However, Lauffenburger discloses: "In one embodiment, memory 20 includes a plurality of memory queues 36 and a plurality of individual cell buffers 50. Memory queues 36 store data cells 18 that are prefetched from host 12 for future scheduling and transmission along a particular virtual channel to remote 14," (lines 51-58 of column 3).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have the first sections stored in a first section queue and the second section stored in a second section queue. "By controlling the size of burst 22, receive data controller 32 avoids impeding the performance of other components of host 12 that may be competing for bandwidth on bus 28 while still optimizing the use of the available bandwidth on bus 28," (lines 11-16 of column 7 in Lauffenburger). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would

have been motivated to have the first sections stored in a first section queue and the second section stored in a second section queue in the system as taught by Hendricks.

30. Claim 58 rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks in view of Lauffenburger as applied to claim 57 above, further in view of Payton.

Hendricks fails to teach: a queue selection module that determines queue for storing the first and the second sections. However, Lauffenburger discloses: "Alternatively, transmit data controller 34 may rely on receive data controller 32 to determine the queue assignment and status for a particular channel," (line 66 of column 7 through line 1 of column 8). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have a queue selection module that determines the queue for storing the first and the second sections. "If memory queue 36 does contain prefetched data cells 18, transmit data controller 34 retrieves a link pointer to the next data cell 18 within memory queue 36 and places the pointer in a transmit register 46 that is resident within transmit data controller 34," (lines 60-65 of column 7 in Lauffenburger). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to have a queue selection module that determines the queue for storing the first and the second sections in the system as taught by Hendricks.

Hendricks also fails to teach: a queue service module that determines a priority for delivery of the first and the second sections. However, Payton discloses: "Items broadcast in response to subscriber requests take priority over the broadcast of the

recommended items," (lines 34-36 of column 5). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have a queue service module that determines a priority for delivery of the first and the second sections. "As a result, the subscribers' on-demand requests are served either from their local server or from the central distribution server 24 virtually on-demand. The subscribers encounter only small delays so that the system appears transparent," (lines 36-40 of column 5 in Payton). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to have a queue service module that determines a priority for delivery of the first and the second sections in the system as taught by Hendricks and Lauffenburger.

31. Claim 62 rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks as applied to claim 60 above, in view of Payton.

Hendricks fails to teach: the reader profile is a group reader profile. However, Payton discloses: "Another type of known information filtering system synthesizes the behavior of a large group of subscribers. Instead of attempting to analyze documents based on keywords or content, a collaborative filtering technique as described by Goldberg, "Using Collaborative Filtering to Weave an Information Tapestry," Communications of the ACM, December 1992, Vol 35, No 12, pp. 61-70, transforms each subscriber into the role of a critic," (lines 41-48 of column 2).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have the reader profile as a group reader profile. "For any given

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subscriber, the likes and dislikes of the subscribers with similar interests are used to predict items that would appeal to that subscriber. Collaborative techniques require a large group of diverse subscribers, both past and present, each having accessed and rated a broad range of different items. As a result, these techniques can accurately predict items that would interest any particular subscriber over a very broad range and can rapidly adapt to changes in a subscriber's needs or preferences," (lines 48-57 of column 2 in Payton). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to have the reader profile as a group reader profile in the system as taught by Hendricks.

32. Claims 71-72 and 76 contain aspects similar to those disclosed in claims 57-58 and 62 respectively and are rejected under the same rationale.

Conclusion

33. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Cheung (U.S. 4,694,483) discloses computerized system for routing incoming telephone calls to a plurality of agent position.

Fernandez (U.S. 4,855,725) discloses microprocessor based simulated book.

Tamaru et al. (U.S. 5,345,580) discloses microprocessor device and emulator device.

Chang et al. (U.S. 5,367,643) discloses high bandwidth adapter having data packet memory w/ three level hierarchy for storage of variable length data packet.

Gusella et al. (U.S. 5,408,465) discloses flexible scheme for admission control of multimedia streams on integrated networks.

Tanihira et al. (U.S. 5,497,459) discloses system for testing instruction queue circuit and CPU.

Dean (U.S. 5,544,342) discloses system for prefetching information in a processing system.

Vishnitzky et al. (U.S. 5,737,747) discloses prefetching to service multiple video streams from an integrated cached disk array.

Emberson (U.S. 5,761,468) discloses mechanism for optimizing instruction and data prefetching by forming augmented prefetch instructions.

Hendricks et al. (U.S. 5,798,785) discloses terminal for suggesting programs offered on a television program delivery system.

Duso et al. (U.S. 5,892,915) discloses system having client sending edit commands to server during transmission of continuous media from one clip in play list for editing the play list.

Petolino, Jr. et al. (U.S. 5,898,852) discloses load instruction steering in a dual data cache microarchitecture.

Hendricks (U.S. 5,986,690) discloses electronic book selection and delivery system.

Jones et al. (U.S. 5,986,677) discloses accelerated graphics port read transaction merging.

Hendricks (U.S. 5,990,927) discloses advanced set top terminal for cable television delivery systems.

Reynolds et al. (U.S. 6,052,717) discloses interactive web book system.

Bladow et al. (U.S. 6,115,040) discloses graphical user interface for web enabled applications.

Zhang (U.S. 6,252,879 B1) discloses single counter for controlling multiple finite state machines in a multi-port bridge for local area network.

Form (U.S. 6,281,986 B1) discloses method for browsing electronically stored information.

Hwang et al. (U.S. 6,535,505 B1) discloses method for providing a time-division multiplexing interface among a high-speed data stream and multiple processors.

Lewis et al. ("Shared Books: Collaborative Publication Management for an Office Information System") discloses publication lifecycle.

Mann et al. ("A Coherent Distributed File Cache with Directory Write-Behind") discloses caching and real-time networks.

Soloviev ("Prefetching in Segmented Disk Cache for Multi-Disk Systems") discloses multi-disk cache storage and queues.

34. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Meucci at (571) 272-3892. The examiner can normally be reached on Monday-Friday from 9:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Harvey, can be reached at (571) 272-3896. The fax phone number for this Group is (703) 872-9306.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [michael.meucci@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you

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